# Product Safety Information

# SEVIN\* 4-Flowable

Agricultural Insecticide Aqueous Suspension





This Product Safety Information Sheet is principally directed to the public carrier, distributor, dealer, warehouser, and applicator whose personnel may be exposed to this product.

The description of physical, chemical, and acute toxicological properties is intended as a starting point for the development of safe handling procedures. Refer to the product label for additional instructions. For any further information, contact Stauffer Chemical Company.

SEVIN 4-Flowable agricultural insecticide containing 4 pounds of Sevin per gallon, is an extremely fine dispersion of Sevin in water.

# I. PHYSICAL AND CHEMICAL PROPERTIES

**Product Ingredients** 

Carbaryl: (1-naphthyl-N-methylcarbamate) (42.6%) Other (57:4%)

**Physical State** 

Off-white liquid

Specific Gravity of Liquid (typical)

1.130 at 20°C/20°C (68°F/68°F)

Flash Point

Greater than 93.3° C/200° F (Pensky Martens Closed Cup)

Viscosity

500-900 cps. at 25°C/77°F (Brookfield #3 spindle @ 30 rpm)

Freezing Point 0° C/32° F

рH

4.5-7.0

# II. CHEMICAL REACTIVITY

The product is further dispersed in water prior to application. Carbaryl is rapidly hydrolyzed to alpha-naphthol in strongly alkaline solution (pH greater than 9).

## III. STABILITY

The product is unstable under highly alkaline conditions. Do not mix or use with lime, bordeaux, lime-sulfur, casein lime spreaders or other alkaline materials.

The product is stable at atmospheric pressures and temperatures above 0°C/32°F. The material freezes at 0°C/32°F and repeated freezing/thawing may impair utility.

#### IV. FIRE HAZARD

The product has a closed cup flash point of greater than 93.3° C/200° F. It is not considered flammable. However, it may decompose under extreme fire conditions to give off toxic materials.

#### V. FIREFIGHTING TECHNIQUE

Vapors may be irritating to the respiratory tract and may cause breathing difficulty and pulmonary edema. Symptoms may be delayed several hours or longer depending upon exposure.

As in any fire, prevent human exposure to fire, smoke, fumes, or products of combustion. Evacuate nonessential personnel from the fire area.

Wear full-face, self-contained, breathing apparatus and impervious clothing such as gloves, hoods, suits and rubber boots.

Use standard firefighting techniques in extinguishing fires involving this product. High pressure water hose may spread product from broken containers increasing contamination hazards. Use of contaminated buildings, areas, and equipment must be prevented until they are properly decontaminated.

# VI. TOXICOLOGY

CAUTION: Harmful if inhaled or swallowed. Do not breathe spray mist or take internally. Avoid contact with skin. Carbaryl is a moderate, reversible, cholinesterase inhibitor.

#### Ingestion

The acute oral LD50 is 794 mg/kg in female rats. The acute oral LD50 is 1,710 mg/kg in male rats. A single oral dose of 464 mg/kg did not produce signs of toxicity. A single oral dose of 1,000, 2,500, or 4,640 mg/kg produced cholinesterase inhibition, decreased physical activity and mortality.

# Skin Contact

The acute dermal LD50 in rabbits is greater than 4,640 mg/kg. A single dermal application of 4,640 mg/kg did not produce signs of toxicity.

Non-irritating to rabbit skin following a 4-hour exposure.

#### **Eye Contact**

Non-irritating to rabbit eyes.

In case of suspected poisoning, refer to the procedure and emergency contacts in Section VII—FIRST AID.

In case of spillage, refer to the procedure and emergency contacts in Section IX—SPILL HANDLING. In case of animal poisoning, call a veterinarian, or call collect, day or night, (203) 226-6602 (Stauffer Chemical Company) or (800) 424-9300 (Pesticide Team Safety Network/Chemtrec).

In case of contamination of other materials with this product, call (800) 424-9300 (Pesticide Team Safety Network/Chemtrec).

\*Trademark of Union Carbide Corporation, U.S. Patent No. 2,903,478





# Threshold Limit Value (TLV)

The American Conference of Governmental Industrial Hygienists has established a TLV of 5 mg/m³ for Sevin Technical.

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#### VII. FIRST AID

# CALL A PHYSICIAN IMMEDIATELY

If a known exposure occurs, or if poisoning is suspected, do not wait for symptoms to develop. Immediately initiate the recommended procedures below, and simultaneously contact either a physician, or the nearest hospital, or the nearest Poison Control Center. Inform the person contacted of the type and extent of exposure, describe the victim's symptoms, and follow the advice given. For additional information, call collect, day or night, Stauffer Chemical Company (203) 226-6602 or Chemtrec (800) 424-9300. Note: Be sure to advise the physician that the compound is a cholinesterase inhibitor, and follow the physician's advice.

Note to Physician: Exposure may cause cholinesterase inhibition. Atropine by injection is antidotal.

#### Ingestion

If swallowed — Immediately dilute the swallowed material by giving large quantities of water. Induce vomiting by gagging the victim with a blunt object placed on the back of the victim's tongue. Continue fluid administration until vomitus is clear. Never give anything by mouth to an unconscious person. Call a physician or the nearest Poison Control Center immediately.

#### Skin Contact

Wash all affected areas with plenty of soap and water. Seek medical attention if respiratory irritation develops.

#### Eye Contact

Flush the eyes with running water for 15 minutes. Hold the eyelids apart during the rinsing to ensure flushing of the entire surface of the eyes and lids with water. Obtain medical attention if eye irritation occurs.

# Inhalation

Remove from contaminated atmosphere. Seek medical attention if respiratory irritation occurs.

#### VIII. INDUSTRIAL HYGIENE

# Ingestion

All food should be kept in a separate area, away from the working location. Eating, drinking, smoking and carrying of tobacco products should be prohibited in areas where there is a potential for exposure to this material. Before eating, hands and face should be thoroughly washed.

#### **Skin Contact**

Skin contact should be minimized through the use of gloves and suitable long-sleeved clothing.

#### Eye Contact

Eye contact should be prevented through the use of chemical safety glasses, goggles or a face shield.

#### Inhalation

This material should only be handled in a well-ventilated area. Where adequate ventilation is not available and there is a possibility of vapor, aerosol or mist generation, control of inhalation exposures can be achieved through the use of a NIOSh-approved, half-face-piece cartridge, air-purifying respirator for low concentrations.

#### IX. SPILL HANDLING

Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices (refer to Section VIII).



A small spill can be handled routinely. Use adequate ventilation and wear an air-supplied respirator to prevent inhalation. Wear suitable protective clothing and eye protection to prevent skin and eye contact. Use the following procedure:

- 1. Spread a suitable absorbent such as clay, sawdust or kitty litter on the spilled liquid.
- 2. Place sweepings in an open drum.
- 3. Generously cover the contaminated areas with a common household detergent (e.g. TIDE\*). Using a stiff brush and small amounts of water, work the detergent into the spill material forming a slurry. Do not splatter on one's self or bystanders, and completely avoid skin or eye contact with this material. Brush the slurry into cracks and crevices; and allow to stand for 2 to 3 minutes.
- 4. Spread a suitable absorbent such as clay, sawdust or kitty litter on the slurried liquid. Shovel absorbed material into an open drum.
- 5. Repeat if necessary.
- 6. Flush the area with water, while observing proper environmental considerations.
- 7. Seal drum and dispose of contaminated material in an approved pesticide landfill.

Large spills must be handled according to a predetermined plan. For assistance in developing a plan, contact Stauffer's Agricultural Chemical Division, Westport, CT 06880.

IN CASE OF EMERGENCY, CALL, DAY OR NIGHT (800) 424-9300 PESTICIDE TEAM SAFETY NETWORK/CHEMTREC

# X. CORROSIVITY TO MATERIALS OF CONSTRUCTION

The product is not significantly corrosive to materials commonly used in the construction of process equipment, storage and shipping containers.

# XI. STORAGE REQUIREMENTS

Containers should be stored in a cool, dry, well-ventilated area. Store away from flammable materials and sources of heat and flame.

Do not store near seeds, fertilizers, or foodstuffs. Exercise due caution to prevent damage to or leakage from the container.

Product freezes at 0°C/32°F. Repeated freezing/thawing may impair utility. Warm or store at a higher temperature and mix thoroughly before use to assure uniformity.

### XII. DISPOSAL OF UNUSED MATERIAL

Material that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Consult with Federal, State or local disposal authorities for approved, alternative disposal procedures.

#### XIII. DISPOSAL OF CONTAINER

Dispose of empty container in a landfill approved for pesticides. Consult with Federal, State or local disposal authorities for approved, alternative disposal procedures.

# XIV. ENVIRONMENTAL PRECAUTIONS

This product is highly toxic to bees exposed to direct treatment or residues on crops. Substantial number of bees may be killed. Refer to the product label for instructions.

\*Reg. T.M. Procter & Gamble Co.